REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

0

AD-A283 177

rerage 1 hour per response, including the time for reviewing instructions, searching existing data sources, the collection of information. Send comments regarding this burden estimate or any other aspect of this o Washington Headquarters Services, Directorate for information Operations and Reports, 1215 Jefferson Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

TE

3. REPORT TYPE AND DATES COVERED

| 4. HILE AND SUBTILE | • |
|------------------------|------------------------------|
| A Legislative examinat | tion of the New Perspectives |
| 6 AUTHOR(S) | - |

5. FUNDING NUMBERS

LAURA SMith

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

8. PERFORMING ORGANIZATION REPORT NUMBER

Colorado State University

94100

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

DEPARTMENT OF THE AIR FORCE

AFIT/CI

2950 P STREET

WRIGHT-PATTERSON AFB OH 45433-7765

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

DT ELECTE AUG 12 1994

12a. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for Public Release IAW 190-1
Distribution Unlimited
MICHEAL M. BRICKER, SMSgt, USAF
Cheif Administration

126. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

14. SUBJECT TERMS

15. NUMBER OF PAGES

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT

18. SECURITY CLASSIFICATION OF THIS PAGE

19. SECURITY CLASSIFICATION OF ABSTRACT

20. LIMITATION OF ABSTRACT

NSN 7540-01-280-5500

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to stay within the lines to meet optical scanning requirements.

- Block 1. Agency Use Only (Leave blank).
- **Block 2.** Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.
- Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 30 Jun 88).
- Block 4. <u>Title and Subtitle</u>. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.
- Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract PR - Project
G - Grant TA - Task
PE - Program WU - Work Unit
Element Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

- **Block 7.** <u>Performing Organization Name(s) and Address(es)</u>. Self-explanatory.
- Block 8. <u>Performing Organization Report</u>
 <u>Number</u>. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.
- **Block 9.** Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.
- **Block 10.** Sponsoring/Wonitoring Agency Report Number. (If known)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. <u>Distribution/Availability Statement</u>. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank. NTIS - Leave blank.

Block 13. Abstract. Include a brief (Maximum 200 words) factual summary of the most significant information contained in the report.

Block 14. <u>Subject Terms</u>. Keywords or phrases identifying major subjects in the report.

Block 15. <u>Number of Pages</u>. Enter the total number of pages.

Block 16. <u>Price Code</u>. Enter appropriate price code (NTIS only)

Blocks 17.-19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. <u>Limitation of Abstract</u>. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

A legislative examination of the New Perspectives Program.

Laura Smith1

Abstract

"We need a fundamental reform in managing all of the resources associated with the lands of the National Forest system ... The days have ended when the forest may be viewed as timber. The soil and the water, the grasses and the shrubs, the fish and the wildlife, and the beauty that is the forest must become integral parts of the resource manager's thinking and action" (Humphrey in Greiman 1990). This call for change and plea for policy revision within the U.S. Forest Service could easily describe the difficulty facing the agency in the 1990s. Ironically, it is a passage taken from Senator Hubert Humphrey's initial speech to Congress in 1976 as he introduced the National Forest Management Act. The problem today is a familiar one for the Forest Service-- public discontent with land management policies.

In an attempt to confront public dissatisfaction, the Forest Service has devised a program called New Perspectives. The purpose of this report is threefold: 1) to explain the current controversy facing the U.S. Forest Service from an organizational theory view point; 2) to examine the New Perspectives program and options that the Forest Service has for its effective implementation; and 3) to consider both formal and informal alternatives for implementing program goals and objectives. After examining both strategies, a recommendation will be made that incorporates both formal and informal applications of the program in order to achieve increased levels of public confidence in the Forest Service.

Pist Avail and / or Special

94−25397

¹ M.S. candidate, Dept. of Political Science, College of Arts, Humanities and Social Sciences, Colorado State University, Ft. Collins, Colo.

Introduction

"In India they run many affairs through something called the Punjayat. The Punjayat, which is similar to the County Board of Supervisors, makes collective decisions for the people of five different communities of India. One of the Punjayat leaders always started proceedings with the same instruction, regardless of the matter brought before the Punjayat; 'there is only one consideration to take into account, don't look at this matter from your own point of view, and don't look at this matter from how those living in the village right now might be affected, but look at it from the point of view of our grandchildren.' This statement captures the essence of sustainability questions, and the search for a better model of stewardship of land and resources" (Salwasser 1992).

This story, told by Hal Salwasser, the director of New Perspectives, gives insight into what challenges the U. S. Forest Service is facing today. The Forest Service is being held accountable for the health of future generations in all spheres of its influence. These realms of influence include responsibilities on national lands: practicing sound ecosystem management, demonstrating a solid commitment to the welfare of species and incorporating provisions for biological diversity.

The historical path that has led to the changes currently confronting the Forest Service will be traced in order to

identify the current problems facing the Forest Service and explain the debate surrounding the agency's crisis. The policy of New Perspectives, which the Forest Service designed to meet the test of agency credibility, will be analyzed by evaluating its goals and objectives. Two different aspects of facilitating New Perspectives will then be explored—a formal and an informal approach to implementation. An examination of different alternatives will be critiqued on the basis of political, economic, and programmatic advantages and disadvantages. Finally, recommendations based on feasibility of each avenue and overall effectiveness will be made.

What is the problem?

The impetus for change has stemmed from the Forest Service's own internal structure, the political environment of the 1990s and shifting values in the public sector. As a result of fundamental value changes, the public has become disenchanted with the Forest Service's management. Employees within the agency likewise have become concerned with the Forest Service's ability to carry out its mission which critics claim "does not reflect the quality land management priorities expected on the basis of [forester-pioneer] Pinchot's foundation" (Wilkinson 1992).

Wilkinson describes the current Forest Service dilemma as a contemporary paradox: "the most distinguished natural resource management agency in the world ... the U. S. Forest

Service ... is in the deepest crisis of its century-long existence" (Wilkinson 1992). He also details the expansion of timber cuts: the annual cut remained at one billion board feet from the early 1900s until 1941. With a demand for a timber increase during World War II, the cut rose to three billion board feet (Wilkinson 1992). Following World War II, the annual output of timber rose to eleven billion board feet to meet the housing boom necessities (Wilkinson 1992). For the next fifty years, the harvest remained at that level. In 1991 the first decrease was made— to 9.3 billion board feet; likewise, the harvest for FY 1992 is 8.5 billion board feet (Wilkinson 1992). The reductions in the recent years reflect the political pressures felt by the Forest Service.

An angry sector of the public is demanding reform of the timber industry's ability to "drive the system" in determining the annual harvest (Wilkinson 1992). The current timber controversy is compounded by the "below-cost sales" that have been a part of the Forest Service's practice. In the Rocky Mountain area alone, even with increased public attention, one-half of the sales remains below cost (Wilkinson 1992).

The source of debate and controversy is described by

Keiter (1990) as a historical precedence whereby "federal land

managers have treated natural resources as discrete entities,

focusing on their economic value and paying little attention

to underlying natural systems or processes." Two geographical

areas that have attracted the greatest controversy are the

Greater Yellowstone Ecosystem and the Pacific Northwest.

In the Greater Yellowstone Region, the impact of mining on the grizzly bear and the practice of logging "right down to the park lines" has resulted in public upheaval (Keiter 1992). Political pressure is recognized in this area as having a direct impact on federal land and natural resource policy because "grizzly bears don't vote, and coyotes don't contribute to political campaigns ...hunters vote, pay the freight for fish and game agencies, and are politically powerful" (Coggins 1987).

In the Pacific Northwest, the issues are Old Growth and the timber industry's effect on the spotted owl. However, critics argue that Greater Yellowstone and the Pacific Northwest are not merely representing issues of wildlife, timber and species preservation as the media depicts them. Instead, the public's concern involves "this generation's use of the natural resources versus another generation's use of the natural resource; i.e., our grandchildren's options" (Salwasser 1992). In addition to media coverage of this conflict, the judicial system bears evidence of a real problem—— litigation continues to increase.

The problem the Forest Service is trying to resolve is a significant issue transcending political and ecological boundaries. The Forest Service's publicly proclaimed mission is "caring for the land and serving people;" yet critics assert that certain actions by the agency do not uphold these

principles. For instance, the courts must continually act as a watchdog over Forest Service practices. In Thomas v.

Peterson (1985), the Forest Service was required to write an Environmental Impact Statement (EIS) that included analysis on a comprehensive level for a road construction effort. The original EIS "did not mention or analyze the timber sales that were scheduled once the road was completed ... [but rather represented] piecemeal fragmentation of public lands by serial development decisions" (Keiter 1990). Thus the sincere 'care' and 'service' the Forest Service claims becomes questionable when environmental analysis is splintered. Although the Pacific Northwest is heavily strewn with Forest Service controversy, no region appears immune to managing practices inciting public outcry.

Identifying roots of the dilemma - organizational focus

When analyzing the Forest Service as an organization, explaining the current challenges becomes a function of agency effectiveness. The three prominent veins for evaluating an organization's effectiveness are through the goal approach, the systems-resource approach and the stakeholder approach (Bedeian and Zammuto 1991). In the case of the Forest Service, the most germane avenue for studying the agency is through the stakeholder or multiple-constituency approach. This theory "directs attention to an organization's relationship with its larger environment and ... to the

organization's performance" (Bedian and Zammuto 1991).

In this analysis, an organization is considered a function of its stakeholders in terms of how goals, policies and objectives are set. And more importantly, effectiveness is defined according to this group as well. "Stakeholders" include a wide range of actors -- employees, share holders, customers, owners or the general public. Bedian and Zammuto (1991) explain that "the various groups, both external and internal, that can either affect or be affected by an organization's performance ... have a 'stake' in an organization's continued survival, and at the same time, play a vital role in its success." Clearly, the Forest Service represents an organization that is strongly influenced by many different "stakeholders"-- from the internal network of employees to timber harvesters, ranchers, wild life preservationists, recreationalists, private landowners, conservation biologists, and citizens at large. Under this category, effectiveness is defined as the degree to which these groups are content with the agency's accomplishments. Effectiveness evaluations introduce a root of the current controversy for the Forest Service, for "effectiveness is an inherently value-based concept ... [and] lies in the eyes of the beholder" (Bedian and Zammuto 1991). Obviously the timber industry will evaluate the Forest Service's effectiveness on different grounds than conservation biologists, employees may have a different evaluation than the general public, etc.

agency will inevitably have difficulty appealing to the wants and desires of each of these different groups in setting goals and policies. Controversy thus enters the organizational picture. Consequently, "each aspect of an organization's performance is likely to result in the increased dissatisfaction of others ... [and then] managers engage in a balancing act, trying to at least minimally satisfy diverse preferences for performance" (Bedian and Zammuto 1991).

A comparison between the Forest Service and the Reserve Mining Company can lend insight into the present managerial crisis facing the Forest Service. The Reserve Mining Company, established to mine taconite (an iron ore), experienced a definite swing in evaluations of organizational effectiveness. Over the period from its initial establishment (1947) to the early 1980s, their 'stakeholders' changed their judgments, much like the shift in Forest Service evaluation (Bedian and Zammuto 1991). Four major reasons can be attributed to this change. These are worth attention because they identify reciprocal applications to the Forest Service.

The first change was the addition of stakeholders over time. The Reserve Mining Company found itself with many more stakeholders in 1977 than it did in 1947. Similarly, the Forest Service has drastically changed its own stakeholders since 1905. Many more groups have been added which include wildlife protectionists, conservation biologists, scientists, members of academia, non-users and different commodity

industries relying on products from national forests.

The second alteration involved the "changing stakeholder preferences [which] resulted in changing evaluation of Reserve's performance over time" (Bedian and Zammuto 1991). On a comparable level to the Forest Service, a major changing stakeholder was society-at-large. For a relatively long period of our nation's history, the public was not avidly concerned about issues such as clearcutting, species preservation, biodiversity and other topics that now receive vocal attention from many spheres of the public. Thirdly, "stakeholder evaluations of Reserve's performance changed over time-- from positive to negative-- even though Reserve continued operating in the same way between 1947 and 1977" (Bedian and Zammuto 1991). Similarly, the Forest Service has become inundated with recent criticism about managerial practices that were ignored or of no interest by the stakeholders for years. The Forest Service has not altered managerial style and practices in such a way as to bring on a wrath of unpopularity. Although slow changes in management have occurred over time, these changes have not been so drastic as to provoke the intense dissatisfaction that exists today. Rather, evaluations of these time-bound procedures have evolved from positive to negative.

Finally, conflicts of interest are to blame for evaluation changes: "satisfying the preferences and expectations of some stakeholders led to the dissatisfaction

of other stakeholders" (Bedian and Zammuto 1991). It is an understatement to recognize that successfully pleasing both stakeholders such as the timber industry and staunch environmentalists is a challenge. Therein lies the lose-lose type situation that the Forest Service often faces over policy issues. What one stakeholder views as effective, another views with contempt. To prioritize which stakeholder is more valued is a difficult, if not virtually impossible, task for the agency.

How do these ramifications of changing stakeholders and evaluations affect an agency like the Forest Service? "The implication ... for managers is that they must remain aware of what is happening in the world. It is exceedingly difficult to satisfy demands you know nothing about. Also, an organization's goals should be periodically examined to see whether they fit an organization's existing social environment. In short, managers must be aware that their task is one of continually becoming effective, rather than being effective, because the definition of effective performance changes over time" (Bedian and Zammuto 1991). New Perspectives is the agency's answer to the call from various stakeholders to revise management practices in the Forest Service.

How is the Forest Service addressing the problem ?

The Forest Service's response to the problems it faced in

1990 was the creation of New Perspectives. This program has been classified by a multitude of labels: a philosophy, a mindset, an attitude, a new form of ecosystem management, a new way of approaching land management within the USFS, a renaming of fundamental principles already in USFS doctrine, and many other similar descriptions (Salwasser 1992, Greenup 1990, Sample 1990). The original director of New Perspectives, Hal Salwasser, has attributed the broad foundation of the New Perspectives policy to New Forestry. This concept implies harvesting in conjunction with preserving biological structure. However, these ideas have extended to include "a different way of thinking about ecological bases and how we're managing lands and resources across the board" (Salwasser 1992). New Perspectives also recognizes in its policy definition "the importance of diverse ecosystems and their processes as the foundation for sustaining resource values and uses" (Greenup 1990). Since its beginning, New Perspectives has broadened beyond the realm of New Forestry to include both technical and social components (Salwasser 1992).

Within the Forest Service, a changing field staff reflects a new set of attitudes and beliefs. The focus is on developing an ecological basis for resources management. This policy trend originated with a change in composition of the agency. Personnel hired in the Forest Service today represent a new commitment— they are more diverse in their disciplines and culture (Sample 1990).

Those assigned to examine the role of leadership in New Perspectives' policy have called on agency leaders to "confirm the values of what they [the field] are trying to bring about, and to bolster their efforts to withstand pressure from those interests that are not advanced through...redefining conservation and public land management" (Sample 1990).

Interests that may oppose the ideas in New Perspectives come from such groups as the National Forest Products
Association. In a speech on New Perspectives to the
Congressional Research Service (CRS) in 1990, Frank Gladics,
Manager of the Federal Timber Sales Programs, appealed to CRS:
"We represent the companies who are wholly or partially dependent an National Forests for their supply of logs to run their mills. Thus, any change by the Forest Service in how, when or why they chose to offer timber, impacts the folks I represent. Quite frankly, given what we have heard and seen of New Perspectives, we are extremely concerned." Indeed the stage for conflict is set.

The evolution of New Perspectives.

Within the Forest Service, New Perspectives has been evolving in terms of its program goals and objectives.

Director Hal Salwasser (1992) outlined three principles that are "over-arching challenges that provide a framework for action." The first one involves the U. S. Forest Service's role in stewardship and trusteeship: "...to learn to manage

the land with diversity of mind, diversity of life, and diversity of ecological processes -- simultaneously in multiple geographic scales... (Salwasser 1992).

The second principle is a recommitment of the agency to conservation. This tenet is aimed at making responsible decisions that address the root of many of today's problems—demand. Salwasser sums this point by stating that many people feel the "solution is to reduce supplies, while we do nothing to affect the demand. The net result is we just pass the demand on to someone else" (Salwasser 1992).

The third principle is "to nurture a more responsible environmentalism on all geographic scales the United States is an affluent country. It's one of the few nations that can afford to produce natural resources and pay for the environmental protection that goes along with production" (Salwasser 1992). The three challenges are then related to three implications - ecosystem management, interdisciplinary partnerships and the freedom for local-level solutions developed specifically for local conditions (Salwasser 1992).

Along with Salwasser's principles, goals have also been defined for New Perspectives which include "diversity, productivity and renewability" (Greenup 1990). The principles are presented to district levels of the Forest Service in four distinct areas: sustainability, integration, participation and collaboration. Under these divisions, topics that are emphasized include stewardship, collaboration, addressing all

issues (resource, economic and social), and improvement of customer service (Trujillo 1992). Thus, while the goals and objectives are assigned different semantics, their basic meanings are fundamentally the same for each set of labeling.

Is New Perspectives alleviating the problem ?

To best evaluate how New Perspectives attempts to relieve the problems it was designed to address, current programs within the Forest Service which exemplify New Perspectives' principles should be scrutinized. One such program is in the Arapaho Roosevelt National Forest's Redfeather District. A project has been implemented entitled "Estes Valley Hazard Fuels Reduction Initiative" (Langowski 1992). Under this project five elements specifically relating to New Perspectives' goals are integrated. For instance, stewardship is demonstrated in the very goal of the project -- to combat a dilemma that the population of the Estes Valley area faces. The problem being addressed is the result of two trends that have occurred over a long period of time-- the increase of development in the forest environment and the history of fire suppression that has accompanied the development. Recognizing a need for an ecological solution, two tools have been developed -- fire restoration and vegetation management. These have been presented as options to the public to recreate the natural processes that have not been able to occur (Langowski 1992).

Participation is another aspect of the program that is represented through the project goals. Public involvement is encouraged via education and awareness to the local citizens through presentations where the public can become informed on both the management tools and risks involved. The public is actively involved in determining the levels of treatment—both on federal and private lands. Another New Perspectives' principle, collaboration, is a key to this project. Those that have been involved in collaboration include the Estes Valley Improvement Agency, Rocky Mountain National Park, Larimer County Sheriff's Department, Colorado State Forest Service, the Roosevelt National Forest and private landowners (Langowski 1992).

Another New Perspectives' principle, addressing relevant issues, is an integral part of this program. Wildland firefighters now must be attentive to not only the acreage of timberlands that would be destroyed in a fire, but also private homes and the corresponding social and economic impacts of such a disaster (Langowski 1992). In combining specific principles of New Perspectives, the risk of wildfire on land in the area—both federal and private—is being reduced through this collaborative effort of the Hazardous Fuels Reduction Program (Langowski 1992).

The Controversy

Despite evidence of progress in the implementation of New

Perspectives such as the Hazardous Fuels Reduction Programs in the Arapaho Roosevelt National Forest, many argue that such change is not enough and not as effective as the Forest Service intends it to be (Keiter 1990). As a result, some insist that a more formalized approach is in order. Within this argument is the assertion that what the program needs for increased policy efficiency is some form of legislative validity. The opposing view is that the informalization of policy implementation— no legislation—is New Perspectives' key to success. The proponents of the later view claim effectiveness can best be met through the current agency structure. Each of these alternatives will now be examined.

Formalisation

Present categories of natural resource law consist of three overlapping classes. First, there are statutes that make land allocation decisions (establishing parks). Second, substantive laws set "clear statistical limits" in a managerial context (Wilkinson 1992). Examples of this type are the Endangered Species Act, the Clean Water Act and the Clean Air Act. The third group includes the "process laws" such as NEPA and FLPMA. New Perspectives applies to substantive law. These are concerned with multiple-use lands management, ecosystem impact and the like (Wilkinson 1992).

While New Perspectives is completely "legal" in that it is "based entirely on existing law" such as the National

Forest Management Act (NFMA) and the Multiple-Use Sustained Yield Act (MUSYA), current criticism is directed towards the legislation's inherent tendency to "breathe discretion at every pore." The intent and principles of New Forspectives may be found in the existing legislation; however, the argument arises that judgment left in interpreting these laws is too great. Because one of the goals of New Perspectives is to replace traditional managerial discretion with "justified management goals to ensure ecological integrity," a reliance on laws that are discretion laden may not be productive for achieving the policy goals of New Perspectives. The historical precedence of agency discretion has contributed to the current crisis; thus, legislation that encourages or enables discretion is likely to be contested on the grounds that it would foster the continuing problem.

Management Act of 1976 (NFMA) is under current criticism for the broad interpretation that can be made under the legislation as it is currently written. For instance, the overt lack of a definition of biodiversity and the lack of a requirement for biodiversity at any level are cited as gaps within the legislation. There is, in fact, only one provision for biodiversity that specifies "guidelines for diversity based on sustainability of a land area to meet multiple-use objectives" (Keiter 1992).

According to Keiter, the Multiple-Use Sustained Yield Act

(MUSYA) of 1960, which serves as a decision-making basis for land planning decisions, does not set "discrete limits on discretion;" rather, it is flexible and broad in scope, much like the NFMA.

Endangered Species Act (ESA). The Endangered Species Act (ESA) is unable to provide biodiversity with the legal assistance and backing it needs. This is mainly due to the species-by-species focus of the ESA. As such, it remains unable to become "an optimal tool for the preservation of biological diversity" (Doremus 1991). The ESA also operates only in a random fashion in the protection of ecosystems because it is "simply not designed to take a species role in its ecosystem into account" (Doremus 1991).

The ESA is another law that can be critiqued for its implicit grey areas of implementation. To be listed as an endangered species, data evaluation is the responsibility of the Department of Interior where "these apparently strictly technical decisions hide an abundance of agency discretion...[and] wildlife managers and others tend to rely on experience and intuition in judging a species status" (Doremus 1991). Unfortunately, when discretion is possible, political pressures are often the most effective influence on policy decisions.

Mational Environmental Policy Act (NEPA). NFMA, MUSYA and ESA are not the only laws open to interpretation. NEPA is another law that is subject to diverse translation. Once the

procedural requirements of the law are met in Section 102complying with a requirement for an environmental impact
statement under significant major federal acts -- an agency is
then at liberty to make any substantive decision it desires
(Wilkinson 1992; Taylor 1992). The decisions are not mandated
to be in accordance with the environmental impacts assessedjust that an assessment is done. This is often not on a
parallel with environmental concerns that one might expect.
For instance, in the Supreme Court decision in Robertson v.
Methow Valley Citizens Council (1989), "under NEPA the Forest
Service could approve the challenged ski resort proposal even
if it would decimate the entire resident mule deer herd"
(Keiter 1990).

Discretion is just one aspect of NEPA that incites criticism. Another aspect is whether NEPA is able to "adequately address transboundary resource management problems" (Keiter 1990). In appraising environmental impacts under NEPA guidelines, the importance of the evaluation lies in the ability to sufficiently address ecosystem integrity. The difficulty arises when property on proximate lands is essential to include in the survey research in order to thoroughly identify impacts on the ecosystem. When these lands do not belong to the same agency, a problem is created. As Keiter (1990) notes, in continuing to define the meaning of NEPA, the Supreme Court decided in Robertson v. Methow Valley Citizens Council (1989) that the "Forest Service had no

authority to implement mitigation measures on adjacent property or to compel another governmental entity to adopt such measures...NEPA neither imposes a legal obligation on federal land managers to protect shared ecosystem resources, nor does it vest them with extra-jurisdictional authority."

One option would be new legislation. For instance, a new law encompassing ecosystem management would be a possibility for more explicit directives under the principles of New Perspectives (Wilkinson 1992). This would combat the fragmentary nature of laws pertaining to New Perspectives and would provide far less room for interpretation. Some proponents of formalization contend that New Perspectives will only transform agency policy "when the Forest Service adopts mandates into binding legal commitment" (Wilkinson 1992). That is, only when new legislation is instituted, will commitment be demonstrated for the principles of New Perspectives.

Alternatives under formalisation

Doremus (1991) outlines possible options for improving the legal protection of biological diversity, ecosystem management and species preservation. These areas are components of New Perspective's goals and objectives.

Representative Ecosystem Act (REA).

First, and perhaps most radical and effective, would be a Representative Ecosystems Act (REA) to "implement a program of

ecosystem preservation* (Doremus 1991). Under such legal framework, requirements would exist to make typologies of ecosystems. Either the National Academy of Sciences or the Ecological Society of America could assist with such a task. Also under the REA, a national database would be developed to identify all of the U.S. ecosystems currently in existence. Priorities for protection would then be established. Most importantly, this priority listing would not require near extinction before a species earns protection. Decisions would assess both the amount and the types of each identified ecosystem that would be designated for preservation.

The REA could also incorporate "conservation easements" (Doremus 1991) which would delineate what activities a private landowner could do based on the degree of environmental impact.

Advantages-

Political:

- (1) comprehensive legislation: provides the most protection of all of the alternatives (ecosystem diversity would be successfully taken into consideration);
- (2) timing: ESA currently being evaluated for reauthorization makes it an appropriate time to move from a species approach to consideration of entire ecosystems.

Economic:

(1) cooperation between federal and state governments could

render a shared expense of policy implementation.

Programmatic:

(1) due to differences and uniqueness of each ecosystem, arranging a typology would aid in determining what the tangible differences are between the ecosystems.

Disadvantages-

Political:

- (1) highly controversial with political success doubtful;
- (2) the use of conservation easements would be contested on the basis of personal property rights.

Economic:

- (1) the cost of accumulating a database would be immense;
- (2) timing: the economy and growing deficit take the prominent position in political arenas; unlikely such a costly endeavor would be approved.

Programmatic:

(1) The chore of defining ecosystems and deciding the extent of protection for each one would be extremely difficult and invite discretion.

NEPA Amendment

Another possibility for legal reform is an amendment to NEPA. This would mainly affect the content of environmental impact statements—requiring assessments to include effects on biological diversity (Doremus 1991).

Advantages-

Political:

(1) much less likely to "arouse organized political opposition than an REA" (Doremus 1991).

Economic:

(1) inexpensive because ecosystems would be preserved without land purchases by the government.

Programmatic:

(1) application to all areas-- not merely specific land areas.

Disadvantages--

Political:

(1) limited to federal actions or when private permits are requested-- leaving private action unchecked.

Economic:

(1) favors a short-term approach and not "incremental, long-term, or indirect effects" (Doremus 1991).

Programmatic:

(1) NEPA is not a substantive law-- it is procedural; therefore protection of biological diversity and resources would not be required.

The same result a NEPA amendment could render may also be achieved through the Council on Environmental Quality (CEQ): "if the CEQ were to mandate that EIS's contain an analysis of the effect of a project on biological diversity, the courts would likely honor that direction" (Doremus 1991).

ESA modifications

The main weaknesses of the ESA are that it has no datagathering stipulation and no ability to set species priority. If these two provisions were included in the ESA, it could provide a more adequate defense of biological diversity. Important modification would require adapting a definition of biodiversity in the act. Another key change to the ESA is a proactive rather than reactive approach to preserving species: "it should remove the requirement that species be on the brink of extinction before protection is provided" (Doremus 1991).

Advantages-

Political:

(1) certain changes, like species priority listing "could be made administratively, with no need for new legislation" (Doremus 1991).

Economic:

(1) intervention in species preservation would be more economical and effective.

Programmatic:

(1) biodiversity protection would be greatly enlarged by adopting a system of priority listing among species, especially if species were evaluated according to their respective ecosystem.

Disadvantages-

Political:

(1) political controversy may increase due to discretion

involved in "decisions ... made as to how much protection is enough" (Doremus 1991).

- (2) "cumbersome to administer" (Doremus 1991).
 Economic:
- (1) the modification would enhance the economic problem that already exists -- declaring "that all species be preserved, but ... not providing unlimited funds to accomplish that goal" costly to achieve (Doremus 1991).

Programmatic:

- (1) the concept of species priority listing is a "real difficulty...[in] that it provides no easy point of reference for the Fish and Wildlife Service to use to identify the species to be considered" (Doremus 1991).
- (2) biodiversity may be sacrificed if a single-species approach is maintained instead of considering species relative to entire ecosystems

Formalisation under organisational theory

In addition to the legal aspect of the formalization argument, some attention to organizational formalization is in order. In this context, formalization is defined as "the extent to which rules, policies, procedures, formal training, norms, and traditions standardize behavior in an organization ... [and] govern behavior" (Bedian and Zammuto 1991). A predominant means for formalizing agency goals is through RPPs-- rules, policies and procedures. This is done in an attempt to meet two goals-- making behavior standards to

reduce performance variability (i.e., fostering regulation) and to "promote coordination" (Bedian and Zammuto 1991).

There are three major advantages in using RPPs in a formalization context under New Perspectives.

First, to be more effective when meeting familiar problems, managers use RPPs "to codify the solutions to problems they have solved in the past" (Bedian and Zammuto 1991). Under New Perspectives, the Forest Service can utilize a variety of resources into making an effective decision. If a situation arises again in which these previous 'RPPs' apply, reference to the prior decision may save managerial efforts in terms of reaching a decision.

Second, "as decision-making authority is delegated to lower-level managers, their superiors use RPPs to create boundaries within which decisions can be made. In this way, upper-level managers retain a degree of control over lower-level decision making" (Bedian and Zammuto 1991). Because New Perspectives includes an emphasis on making decisions on a more local level, RPPs may be a useful tool. The Forest Service may be able to effectively institute RPPs relating to New Perspective principles. RPPs could be developed which would insure that decisions on a district level conform to the New Perspectives policies. Thus, RPPs may prevent the policies from getting lost in an administrative shuffle.

Third, "external demands from regulatory bodies, majority shareholders, and so on, can lead to extensive use of RPPs as

top managers attempt to ensure that lower-level employees conform to the standards for which they are held responsible" (Bedian and Zammuto 1991). This dimension of RPPs would only be advantageous to New Perspectives implementation if it provided a vehicle for Forest Service personnel to resist local pressures from certain stakeholders. This assumes that the top-down RPPs would be more ecologically founded because of a decision-making atmosphere that was more distant from local political pressures.

Informalization

While many argue a case against the existing legislation and a corresponding call for new legislation, others assert that there is no need for any new legislation because of three main reasons. First and foremost, advocates claim that the substance of New Perspectives is clearly already in place under existing laws. Therefore, it would be redundant to create more legal justification and corrals for compliance. Rather, a major advance under New Perspectives for the Forest Service would include adherence to laws that currently exist. The proponents of this opinion view New Perspectives as essentially a new labeling of old principles with perhaps a greater urgency in its message (Patten-Mallary 1992).

Secondly, speculation regarding the informalization argument includes the fear that with legislation, more court cases will result. Time and monetary constraints brought on

with litigation will further restrict efficiency. The third objection to formalization is that New Perspectives is a philosophy that cannot be quantified in legal terms (Trujillo 1992). Instead, a grassroots approach to value changes is a more effective means of implementation than equating it to legal terms. Within the Forest Service, there is a fear that legislation would actually do more harm than good in terms of negating the progress that is already being made (Trujillo 1992). A reexamination of laws pertaining to natural lands resource management will reveal the basis for the second side of the New Perspectives strategy.

NPMA

The current inundation of litigation is quite ironic in understanding the purpose with which Senator Humphrey introduced the National Forest Management Act (NFMA) in 1976. At that time, the purpose was to "get out of the courts and into the forests" (Keiter 1992). Yet many argue that this has not occurred; rather, a so-called "paralysis by analysis" has been created as a result of the federal environmental laws that attempt to improve resource decisions.

NFMA is relevant to New Perspectives because of its substantive nature. Unlike the highly procedural NEPA, it contains specific provisions for how the land will or not will not be managed. For example, NFMA "prohibits timber harvesting on steep slopes, protects sensitive riparian zones,

and limits clearcutting as a harvest method" (Keiter 1990).

NFMA is also forcing ecological management decisions in areas like the Pacific Northwest. In the spotted owl controversy, NFMA and the Endangered Species Act "have prodded reluctant federal officials into acknowledging the true ecological implications of their resource management decisions...the Forest Service has responded to the biological diversity requirements in the National Forest Management Act by preparing a regional EIS establishing timber harvest management standards for old growth forests to protect spotted owl habitat" (Keiter 1990).

The passage of the NFMA, according to environmentalists at the time, was a significant step for revising the Forest Service's planning process. Many of the public tones of the 1990s echo the sentiment of the public in 1976: "Support for the act grew out of criticism that the agency tended to emphasize timber harvesting at the expense of the environment. At long last, the Forest Service would be forced to value wildlife and wilderness—not just board feet" (Leal 1990). Today the Forest Service continues to face a familiar criticism. If the legislation passed in 1976 was aimed at resolving this same conflict, and the public welcomed its passage then, perhaps it is mere compliance that needs to be addressed rather than new legislation.

NEPA

While NEPA is procedural and not substantive in its nature, it does still accentuate the objectives of New Perspectives. As Keiter notes, the positive effect of NEPA is that it "promotes interagency coordination and consultation" which is precisely what New Perspectives tries to accomplish (Keiter 1992). At a USDA Forest Service, Pawnee District New Perspectives presentation in April of this year, district foresters and personnel were instructed to foster an interdisciplinary approach with fellow foresters outside their field as well as to collaborate with "resource managers, specialists, partners, researchers, educators and environmentalists" (Trujillo 1992). Interagency cooperation has been enhanced by NEPA among land managers who even "operate under fundamentally different legal mandates" (Keiter 1990). It does this in three stages:

(1). NEPA mandates consultation in the beginning stages of the environmental review process; (2). NEPA provides that federal agencies must identify and evaluate the potential impact of projects at the earliest stages in the environmental review process and that 'affected' agencies ...[are] afforded an opportunity to comment on the proposal; (3). NEPA requires that the EIS include a discussion of 'possible conflicts between the proposed action and the objectives of Federal, regional, State, and local...land use plans' (Keiter 1990).

Thus, the intent of New Perspectives to foster such collaboration among land managers is specifically outlined already in NEPA. This process of a joint effort underscores the basis of ecosystem management, a pillar of New Perspectives. Keiter (1990) again reinforces this point: "By

giving legal significance to the concerns of other land or resource management agencies, these decisions acknowledge the importance of interagency consultation and coordination in public land management, and thus implicitly endorses the notion of ecosystem management.

NEPA also encourages public participation -- another major component of New Perspectives. With the implementation of NEPA, the door has been opened in the review process of environmental impact statements to include a plethora of participants that otherwise would not be included- from state agencies to the general public to environmental groups (Taylor 1992).

NEPA is significant in another New Perspectives objective—managing federal lands with ecological considerations. The first step towards this via NEPA is the pure intimidation that NEPA provides. Knowing that litigation potentially looms on the land manager's horizon, NEPA has "sent agency planners back to the drawing board to reexamine their environmental analyses" (Keiter 1990). Recognizing it is procedural and not substantive, it still effectively "compels land managers to view their actions from an ecological perspective, even if it does not require them to adopt the most ecologically sensitive course of action...[and] is being utilized to implement important substantive laws, such as Endangered Species Act and the National Forest Management Act, which have profound ecological overtones"

(Keiter 1990).

Under the envelope of the informalization argument there is no breakdown of specific alternatives as in the formalization argument. Proponents of this view simply advocate keeping New Perspectives as an "internal management tool" (Patten-Mallary 1992) because it is more effective as a means for agency personnel to accomplish day-to-day jobs.

Agency officials also fear a loss of the progress already made if legislation is introduced. This fear stems from the belief that legislation would reduce the initiatives of New Perspectives to "cookbook" prescriptions by Congress rather than innovative agency-driven proposals (Patten-Mallary 1992). Along these lines, agency personnel also express concern that the collaborative steps that have been taken by the Forest Service, wildlife preservationists, scientists, general public and other stakeholders will be lost. They are concerned that legislation would actually undermine the confidence these groups have developed in the Forest Service under New Perspectives (Trujillo 1992). Instead, the supporters of informalization stress a grassroots approach to effective implementation.

Informalisation under organizational theory

In support of the informalization argument, organizational theorists Bedian and Zammuto (1991) advance the role of informal policy approaches within agencies: "our

position ... is that unwritten rules, norms and traditions can be as effective as formal rules, policies, and procedures in standardizing behavior." Thus, a goal of New Perspectives—to incorporate standardized managerial practices with sound ecological considerations—can effectively be adopted without the formalization approach.

An example of a tool of formalization discussed earlier, RPPs (rules, policies and procedures), are not necessarily compatible with Forest Service implementation of New Perspectives. The case against the formalization argument lies in the role of Forest Service personnel. Managerial tasks of managing forests and public lands are not elementary-type tasks. The tools of formalization—RPPs—are used to "program human behavior much like a computer programmer does a computer. It is possible to do this for simple, repetitive tasks because the most efficient process for completing a job can generally be predetermined" (Bedian and Zammuto 1991). Aside from clerical—type jobs and assignments, Forest Service personnel are not occupants of mundane positions that would lend to such 'programming.' Therefore, formalization does not seem to be an applicable avenue for New Perspectives.

Another key insight into formalization through RPPs is that "research shows that excessive use of RPPs can be dysfunctional for both individuals and their organizations.

The extreme limitation in the workplace can result in ... the bureaucratic personality, where following rules and

regulations becomes more important than achieving an organization's goals. Rules become ends in themselves ... "
(Bedian and Zammuto 1991). Thus, not only is a case against formalization built upon the nature of the Forest Service, it also stems from the "cookbook" theme in which formalization renders management a mere textbook-type task. This can contribute to existing problems in that "heavy use of RPPs creates a reliance on an organization's past experience to interpret and respond to current organizational and market conditions, even as conditions change over time ... 'living in the past' is a major reason that many organizations experience decline. Overuse of RPPs also can destroy individual initiative, eliminate risk-taking behavior, decrease job satisfaction, and lead to high levels of employee cynicism and worker alienation" (Bedian and Zammuto 1991).

Under this examination, the use of RPPs to formalize New Perspectives is not productive. The creation of New Perspectives itself is a byproduct of 'living in the past' that the Forest Service has demonstrated. Thus, RPPs which stress a reliance on former means of management may continue to produce controversy that New Perspectives is trying to quell.

Recommendations

The existing legislation that applies to natural resource management (NFMA, NEPA, MUSYA, ESA, etc.) does indeed embrace

the principles of New Perspectives. However, where discretion has been left to court interpretation and to the land managers themselves, the laws have often failed to exercise the originator's intent. For instance, NEPA was passed by Congress "to reduce ... the tendency of nonenvironmental agencies to overlook environmental values in making decisions" (Wenner in Lester 1989). In evaluating the actual affect of NEPA, "some observers have argued that writing environmental impact statements (EISs) for government projects has merely added to a process on which it makes no substantive impact" (Wenner in Lester 1989, Fairfax 1978).

Additionally, gaps exist in the legal framework in terms of representing new additions to the Forest Service's stakeholders. One such group is non-users: "the increasingly popular principle of nonuse-- the non-utilitarian valuing of public forest-- and rangeland -- is basically absent from those federal laws pertaining to management of lands under the jurisdiction of the BLM and Forest Service" (Henning and Mangun 1989).

One can also find countless court cases (beyond <u>Methow Valley</u>) of legal discord with the goals of New Perspectives.

For instance, in <u>Kleppe v. Sierra Club</u> (1976), the Supreme Court ruled that "the Secretary of the Interior was not obligated to prepare a comprehensive EIS addressing the impact of coal development on the Northern Great Plains region. In short, the cumulative effects model has not yet been

consistently applied to the relevant ecosystem" (Keiter 1990). There are provisions in the natural resource management laws for New Perspective goals such as ecosystem management, species preservation, collaborative approaches to land management decisions, and public participation. However, the interpretation of the laws that contain these tenets by the courts and some agency administrators often prevents the achievement of New Perspective goals. Effectiveness in this area could be enhanced by adopting some form of increased formalization through legislation that defines and specifically requires such tenets. Although current legislation may technically provide for the ecological principles defined by New Perspectives, we cannot afford to wait for court interpretation that will lend credence to these provisions as species continue to be threatened and ecosystems often remain separated from the natural resource management decisions.

New Perspectives has successfully brought more awareness to an environmental approach in searching for solutions for land management. In this probe that started mainly to discover sound management that would deflect Forest Service criticism, another positive effect was discovered: New Perspectives has identified keys that will help solve global environmental problems today -- whether in a federal agency or private industry. Tenets of New Perspectives -- interdisciplinary effort, sustainability, biological

diversity, public participation, collaboration, and stewardship are just some of the concepts New Perspectives has highlighted. Certain elements of each argument — formalization v. informalization — should be accepted. Under the auspices of formalization, the best solution in terms of addressing key issues such as biological diversity would be an act such as the REA. Unfortunately, however, this is not practical for two main reasons — politics and the economy. Under the current economic drains on the federal budget, REA is not feasible. Nor is it politically attractive to the congressional viewpoint because of its "radical" (Doremus 1991) undertones and must therefore be dismissed at the present time, until political and economic conditions are more conducive.

The two alternatives of the formalization options that should be adopted are a modification to both the ESA and NEPA. Because NEPA is currently being examined for the possibility of adopting a biological diversity component, this approach seems most feasible (Keiter 1992). The task of exerting enough attention to render interest has already been accomplished. Additionally, this approach could also be effected administratively "rather than through legislation" (Doremus 1991). Therefore, it has two chances of success. Even though it is procedural by nature, requiring biological diversity considerations in EISs would be a great improvement to the current absolute disregard for such attention.

Another proposal that does not require legal action, but can also be achieved administratively, is a modification to the ESA. This could require setting species and ecosystem priorities. Additionally, the focus could be changed from a species-by-species approach to a broader ecosystem concept, which could also be incorporated into the realm of setting priorities. However, the most effective means of an ESA modification would involve requiring a "mandated overview of the state of the nation's biota" (Doremus 1991). alternative is most attractive because, as stated earlier, it would be much more easily achieved than a REA. It also addresses environmental concerns in a proactive means which is crucial for success in the realm of species preservation and ecosystem sustainability. Finally, it is economically appealing because reactive measures under the ESA as written are much more costly on a fiscal scale. Thus, the preferred mode of both of these adoptions would be in legal terms. However, they are both advantageous because if a legal avenue is not possible, another recourse exists through administrative means.

The Forest Service's first experience with legislation was the Creative Act of 1891. This "included no specific authority for management of the reserves, or any provision for mining, grazing, or other use" (Wilkinson and Anderson 1987). Shortly after this act was passed, "Congress came under pressure to delegate additional management authority over the

forest reserves" (Wilkinson and Anderson 1987) which resulted in the passage of the Organic Act of 1897— thus began the history of reorganization in public land laws. In comparing the first laws established to govern the Forest Service, one can recognize that over the period of our nation's development, the laws have been more clearly defined with modifications, amendments and additions. Therefore, adopting new legislation would not be a departure from historical precedence; rather, it would be in keeping with the revisionist style our land and resource laws have been accustomed to. However, care must be exercised in formulating the specific legislation so that it would not be used merely as a means of restricting agency discretion.

While these formal approaches are recommended, informal measures of New Perspectives cannot be ignored. Grassroots implementation is a significant aspect to the success of New Perspectives. By combining an informal and a formal approach to the Forest Service's New Perspectives policy, greater success can be achieved. The Forest Service cannot afford to ignore either the informal or formal approach aimed at solving the same problem. The advantage to a formal approach is that it is a demonstrative act showing commitment and dedication to the program on behalf of the Forest Service. Keiter (1990) summarizes this point: "absent an explicit mandate providing for the conservation of biological diversity, such as the one governing the Forest Service, the land management agencies

have the apparent discretion to discount -- or perhaps even ignore -- diversity concerns to the detriment of existing ecosystems."

The organizational theory evaluation of formalization versus informalization is relevant in determining recommendations. The elements of New Perspectives do represent a more complex set of principles that cannot be adequately reduced to "RPPs"-- rules, policies and procedures. In terms of implementing, a key to the policy is that it envelopes creativity and coordination which cannot be reflected in prescriptions for across-the-board managers. Two goals of RPPs are "standardized behavior from employees to promote control and improved coordination" (Bedian and Zammuto 1991). New Perspectives will ideally be adopted in every Forest Service district through enhanced coordination. Yet this does not translate into a need for formalization under guidelines as strict as what RPPs aim for-- which can easily curtail employee motivation towards the program.

Under this option, the assumption is that districts will embrace the New Perspectives' goals and translate them into land management practices. However, if this does not occur, then the more formal RPPs must be instituted. These must be regarded as a "last resort" that are employed only if the informal adoption does not occur. In order to effectively incorporate the new strategies into actual practices, the Forest Service should first try to use informal means to

promote successful integration of agency directives under New Perspectives. To a large extent, the Forest Service presently stands at a crossroads and has the opportunity to shape its own destiny without formal interference to dictate sound land management. But if the agency remains unresponsive to the call for better natural resource management, it will sacrifice the opportunity to implement informal directives autonomously. Bates (1992) poses a germane question along these lines:

Is the Forest Service brave enough and independent enough to reassert itself as the preeminent manager of public lands and natural resources in the West? Or will the emerging pressure for change in the public land policy force Congress to pass new legislation, possibly more radical than the Taylor Grazing Act was in its time, in order to restore the agency's mandate for long-term management? The agency must adapt to growing pressures for change in the western policy environment.

Thus the situation for the Forest Service, at the most rudimentary level, involves the concept of change. The agency response to this call for change will largely determine the adoption of either formal or informal implementation. For if the agency remains static, it will not be a question of choice for the Forest Service; the legislative branch will most likely make this decision by instituting new and extremely binding legislation.

The adoption of formal and informal alternatives are not mutually exclusive. That is, utilizing a formal approach (legislation) to instituting the principles of New Perspectives does not mean that informal measures (district directives) cannot also be continued and adopted. In fact, a

combined effort would be the most effective means of attaining the goals of the Forest Service's New Perspectives; thereby successfully meeting the challenging problems of the day.

Only in such a mutual effort can the Forest Service truly act to "Care for the Land and Serve the People."

REFERENCES CITED

- Bates, Sarah. 1992. "The Changing Policy Environment in the West." Rocky Mountain New Perspectives Proceedings of a Regional Workshop. United States. Dept. of Agriculture. Forest Service. Rocky Mountain Forest and Range Experiment Station. Ft. Collins: RM-220.
- Bedeian, Arthur G. and Raymond F. Zammuto. 1991. <u>Organizations:</u>
 <u>Theory and Design</u>. Chicago: Dryden Press.
- Coggins, George Cameron and Charles F. Wilkinson. 1987. <u>Federal Public Land and Resource Law</u> 2nd ed. Mineola: Foundation Press
- Doremus, Holly. 1991. "Patching the Ark: Improving Legal Protection of Biological Diversity." <u>Ecology Law Ouarterly</u>, Vol.18, No. 2:265-335.
- Gladics, Frank M. "New Perspectives: Is it the Forest Service's Attempt to Fix 'their' Hubble Telescope?" Congressional Research Service. Washington D. C., 13 Jul 1990.
- Greenup, Mel. "New Perspectives." Symposium on Biodiversity. Philadelphia, Jul 1990.
- Greiman, Harley L. "Political Influences To Change In Forest And Resource Management in California." USDA/Old Growth Meeting. Washington D.C., 25 Jul 1990.
- Henning, Daniel H. and William R. Mangun. 1989. Managing the Environmental Crisis: Incorporating competing values in Natural Resource Administration. Durham: Duke Uviversity Press.
- Huffman, James L. 1986. "Trusting the Public Interest To Judges: A Comment on the Public Trust Writing of Professors Sax, Wilkinson, Dunning and Johnson." <u>Denver University Law Review</u>, Vol.63. No. 3:565-584.
- Keiter, Robert B. "Resource Law and Ecosystem Management." Seminar on New Perspectives on Forest Management. University of Wyoming. Larimee, 2 Mar 1992.
- ---. Telephone interview. 12 Mar 1992.
- ---. 1990. "NEPA and the Emerging Concept of Ecosystem Management on the Public Lands." <u>Land and Water Law Review</u>, Vol. 25:43-60.
- Kleppe v. Sierra Club, 427 U.S. 390 (1976).
- Langowski, Paul G. "Estes Valley Hazard Fuels Reduction Initiative." ts. 2. Forest Service - Arapaho/Roosevelt

- National Forest's Nominations for submissions to the 1992 Regional New Perspectives Contest, 1992.
- Leal, Donald. 1990. "Saving an Ecosystem From Buffer Zone to Private Initiatives" in <u>The Yellowstone Primer: Land and Resource Management in the Greater Yellowstone Ecosystem</u>, John A. Baden and Donald Leal eds., Pacific Research Institute For Public Policy:San Francisco.
- Patten-Mallary, Marsha. Research scientist, Rocky Mountain Research Station. Fort Collins, Colorado. Telephone interview. April, 1992.
- Robertson v. Methow Valley Citizens Council, 109 S.Ct. 1835 (1989).
- Salwasser, Hal. 1992. "The Challenge Of New Perspectives."

 Rocky Mountain New Perspectives Proceedings of a Regional
 Workshop. United States. Dept. of Agriculture. Forest
 Service. Rocky Mountain Forest and Range Experiment
 Station. Ft. Collins: RM-220.
- Sample, Al. "Summary of Observations and Recommendations of Working Group 4: Exploring the Conservation Paradigm." Pinchot Institute for Conservation. Philadelphia, 21-23 Jun, 1990.
- Taylor, Jonathan. U.S. Fish ans Wildlife Service. Address. Colorado State University. March, 1992.
- Thomas v. Peterson. 753 F.2d. 754, 759-60 (9th Cir. 1985).
- Trujillo, Dave. U.S. Forest Service New Perspectives Regional Coordinator -- Boulder, Colorado. Personal interview. April, 1992.
- Wilkinson, Charles. "Resource Law and Ecosystem Management." Seminar on New Perspectives on Forest Management. University of Wyoming. Larimee, 2 Mar 1992.
- Wilkinson, Charles F. and H. Michael Anderson. 1987. <u>Land and Resource Planning in the National Forests</u>. Washington D.C.: Island Press.

REFERENCES CITED

- Bates, Sarah. 1992. "The Changing Policy Environment in the West." Rocky Mountain New Perspectives Proceedings of a Regional Workshop. United States. Dept. of Agriculture. Forest Service. Rocky Mountain Forest and Range Experiment Station. Ft. Collins: RM-220.
- Bedeian, Arthur G. and Raymond F. Zammuto. 1991. <u>Organizations:</u>
 <u>Theory and Design</u>. Chicago: Dryden Press.
- Coggins, George Cameron and Charles F. Wilkinson. 1987. <u>Federal Public Land and Resource Law</u> 2nd ed. Mineola: Foundation Press
- Doremus, Holly. 1991. "Patching the Ark: Improving Legal Protection of Biological Diversity." <u>Ecology Law Ouarterly</u>, Vol.18, No. 2:265-335.
- Gladics, Frank M. "New Perspectives: Is it the Forest Service's Attempt to Fix 'their' Hubble Telescope?" Congressional Research Service. Washington D. C., 13 Jul 1990.
- Greenup, Mel. "New Perspectives." Symposium on Biodiversity. Philadelphia, Jul 1990.
- Greiman, Harley L. "Political Influences To Change In Forest And Resource Management in California." USDA/Old Growth Meeting. Washington D.C., 25 Jul 1990.
- Henning, Daniel H. and William R. Mangun. 1989. Managing the Environmental Crisis: Incorporating competing values in Natural Resource Administration. Durham: Duke Uviversity Press.
- Huffman, James L. 1986. "Trusting the Public Interest To Judges: A Comment on the Public Trust Writing of Professors Sax, Wilkinson, Dunning and Johnson." <u>Denver University Law Review</u>, Vol.63. No. 3:565-584.
- Keiter, Robert B. "Resource Law and Ecosystem Management." Seminar on New Perspectives on Forest Management. University of Wyoming. Larimee, 2 Mar 1992.
- ---. Telephone interview. 12 Mar 1992.
- ---. 1990. "NEPA and the Emerging Concept of Ecosystem Management on the Public Lands." <u>Land and Water Law Review</u>, Vol. 25:43-60.
- <u>Kleppe v. Sierra Club</u>, 427 U.S. 390 (1976).
- Langowski, Paul G. "Estes Valley Hazard Fuels Reduction Initiative." ts. 2. Forest Service - Arapaho/Roosevelt

- National Forest's Nominations for submissions to the 1992 Regional New Perspectives Contest, 1992.
- Leal, Donald. 1990. "Saving an Roosystem From Buffer Zone to Private Initiatives" in <u>The Yellowstone Primer: Land and Resource Management in the Greater Yellowstone Boosystem</u>, John A. Baden and Donald Leal eds., Pacific Research Institute For Public Policy: San Francisco.
- Patten-Mallary, Marsha. Research scientist, Rocky Mountain Research Station. Fort Collins, Colorado. Telephone interview. April, 1992.
- Robertson v. Methow Valley Citizens Council, 109 S.Ct. 1835 (1989).
- Salwasser, Hal. 1992. "The Challenge Of New Perspectives."

 Rocky Mountain New Perspectives Proceedings of a Regional Workshop. United States. Dept. of Agriculture. Forest Service. Rocky Mountain Forest and Range Experiment Station. Ft. Collins: RM-220.
- Sample, Al. "Summary of Observations and Recommendations of Working Group 4: Exploring the Conservation Paradigm." Pinchot Institute for Conservation. Philadelphia, 21-23 Jun, 1990.
- Taylor, Jonathan. U.S. Fish ans Wildlife Service. Address. Colorado State University. March, 1992.
- Thomas v. Peterson. 753 F.2d. 754, 759-60 (9th Cir. 1985).
- Trujillo, Dave. U.S. Forest Service New Perspectives Regional Coordinator -- Boulder, Colorado. Personal interview. April, 1992.
- Wilkinson, Charles. "Resource Law and Ecosystem Management."

 Seminar on New Perspectives on Forest Management.

 University of Wyoming. Larimee, 2 Mar 1992.
- Wilkinson, Charles F. and H. Michael Anderson. 1987. <u>Land and Resource Planning in the National Forests</u>. Washington D.C.: Island Press.